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450103-04784.1**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of fingerprinting, comprising:

receiving a plurality of master datasets, each master dataset divided into a plurality of input segments,

wherein at least one master dataset of said plurality of master datasets is uniquely marked; and

producing an output dataset having a plurality of output segments, each output segment of said output dataset generated by:

selecting a corresponding input segment from one of said plurality of master datasets; and

inserting said selected corresponding input segment into said each output segment,

wherein ~~said selecting a corresponding input segment from one of said plurality of master datasets is performed in such a manner that the arrangement of said plurality of output segments in said output dataset~~ as a result of selecting input segments from said plurality of master datasets provides fingerprinting of said output dataset such that the number of output segments in said output dataset is equal to the number of input segments in each master dataset.

2. (Previously Presented) The method of claim 1, wherein at least one master dataset of said plurality of master datasets includes an unmarked dataset.

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3. (Previously Presented) The method of claim 1, wherein said at least one uniquely marked master dataset is marked using watermarking, such that the watermarking is imperceptible to human sensors.

4. (Previously Presented) The method of claim 1, wherein said selecting a corresponding input segment from one of said plurality of master datasets includes pseudo-randomly selecting a corresponding input segment from one of said plurality of master datasets.

5. (Previously Presented) The method of claim 4, further comprising: generating a pseudo-random sequence to enable pseudo-random selection of the corresponding input segment.

6. (Previously Presented) The method of claim 1, wherein said selecting a corresponding input segment from one of said plurality of master datasets includes pseudo-randomly selecting a sequence of input segments from said plurality of master datasets, such that the sequence is selected to provide a relatively high probability of uniquely identifying said output dataset even when said output dataset is partially copied.

7. (Previously Presented) The method of claim 6, wherein selecting a sequence of input segments includes building a pseudo-random sequence of segments,

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wherein the pseudo-random sequence provides information about which input segment was used to build the corresponding output segment.

8. (Original) The method of claim 7, wherein the pseudo-random sequence is represented as a representative master key (RMK).

9. (Original) The method of claim 7, wherein the pseudo-random sequence is represented as a sequence of tuples.

10. (Original) The method of claim 7, further comprising:
burning said produced output dataset onto a physical medium.

11. (Original) The method of claim 10, further comprising:
linking said pseudo-random sequence of segments to said physical medium to uniquely identify each physical medium.

12. (Currently Amended) A fingerprinting apparatus, comprising:
a plurality of receiving units to receive a plurality of master datasets, each master dataset divided into a plurality of input segments,
wherein at least one master dataset of the plurality of master datasets is uniquely marked;
a generator to generate an output dataset having a plurality of output segments, each output segment of said output dataset generated by selecting a corresponding input segment from one of said plurality of master datasets; and

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at least one combiner to arrange the selected corresponding input segment into said each output segment,

~~wherein said generator and said at least one combiner operates in such a manner that the~~
arrangement of said plurality of output segments in said output dataset is a result of selecting
input segments from said plurality of master datasets provides fingerprinting of said output
dataset such that the number of output segments in said output dataset is equal to the number of
input segments in each master dataset.

13. (Previously Presented) The fingerprinting apparatus of claim 12, wherein the at least one master dataset of the plurality of master datasets includes an unmarked dataset.

14. (Original) The fingerprinting apparatus of claim 12, further comprising:
a pseudo-random number generator to generate a sequence of pseudo-random numbers.

15. (Previously Presented) The fingerprinting apparatus of claim 14, wherein said generator is configured to receive the sequence of pseudo-random numbers,
wherein said generator selects said corresponding input segment based on the received sequence of pseudo-random numbers.

16. (Original) The fingerprinting apparatus of claim 14, further comprising:
a media recording device to record the produced output dataset onto a physical medium.

17. (Original) The fingerprinting apparatus of claim 16, further comprising:

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a storage device that links the sequence of pseudo-random numbers to the physical medium to uniquely identify each physical medium.

18. (Currently Amended) A fingerprinting system for fingerprinting media, comprising:
a receiver to receive said media divided into a plurality of media segments;
a first encoder to mark said media, said first encoder producing at least one marked media, each of the at least one marked media divided into a plurality of marked media segments;
a second encoder to compress said media and said at least one marked media;
a generator to generate fingerprinted media having a plurality of fingerprinted segments, each fingerprinted segment of said fingerprinted media generated by selecting a corresponding media or marked media segment from one of said media and said at least one marked media; and
at least one combiner to arrange the selected corresponding media or marked media segment into said each fingerprinted segment,

wherein ~~said generator and said at least one combiner operates in such a manner that the~~ arrangement of said plurality of fingerprinted segments as a result of selecting media segments from said at least one marked media provides said fingerprinted media such that the number of fingerprinted segments in said fingerprinted media is equal to the number of media segments in each marked media.

19. (Original) The fingerprinting system of claim 18, further comprising:
a pseudo-random number generator to generate a sequence of pseudo-random numbers.

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20. (Previously Presented) The fingerprinting system of claim 19, wherein said generator is configured to receive the sequence of pseudo-random numbers,

wherein said generator selects said corresponding media or marked media segment based on the received sequence of pseudo-random numbers

21. (Original) The fingerprinting system of claim 19, further comprising:
a media recording device to record the produced fingerprinted media onto a physical medium.

22. (Original) The fingerprinting system of claim 21, further comprising:
a storage device that links the sequence of pseudo-random numbers to the physical medium to uniquely identify the medium.

23. (Previously Presented) The fingerprinting system of claim 21, wherein the physical medium includes a DVD or video tape.

24. (Original) The fingerprinting system of claim 21, wherein the physical medium includes content downloaded from the Internet.

25. (Original) The fingerprinting system of claim 21, wherein the physical medium includes video-on-demand content transported as stream of data.

26-31. (Canceled)

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32. (Currently Amended) A computer program, stored in a tangible storage medium, for use in fingerprinting an output dataset having a plurality of output segments, the program comprising executable instructions that cause a computer to:

receive a plurality of master datasets, each master dataset divided into a plurality of input segments,

wherein at least one master dataset of said plurality of master datasets is uniquely marked; and

produce an output dataset having a plurality of output segments, each output segment of said output dataset generated by:

selecting a corresponding input segment from one of said plurality of master datasets; and

inserting said selected corresponding input segment into said each output segment,

wherein ~~said selecting a corresponding input segment from one of said plurality of master datasets is performed in such a manner that the arrangement of said plurality of output segments in said output dataset~~ as a result of selecting input segments from said plurality of master datasets provides fingerprinting of said output dataset such that the number of output segments in said output dataset is equal to the number of input segments in each master dataset.

33-39. (Canceled)

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40. (Currently Amended) A fingerprinting apparatus, comprising:

means for receiving a plurality of master datasets, each master dataset divided into a plurality of input segments,

wherein at least one master dataset of said plurality of master datasets is uniquely marked; and

means for producing an output dataset having a plurality of output segments, each output segment of said output dataset generated by:

means for selecting a corresponding input segment from one of said plurality of master datasets; and

means for inserting said selected corresponding input segment into said each output segment.

wherein ~~said means for selecting a corresponding input segment from one of said plurality of master datasets is performed in such a manner that the arrangement of said plurality of output segments in said output dataset as a result of selecting input segments from said plurality of master datasets provides fingerprinting of said output dataset such that the number of output segments in said output dataset is equal to the number of input segments in each master dataset.~~

41. (Currently Amended) A fingerprinting system for fingerprinting media, comprising:

means for receiving said media divided into a plurality of media segments;

means for marking said media, said means for marking producing at least one marked media, each of the at least one marked media divided into a plurality of marked media segments;

means for compressing said media and said at least one marked media;

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means for generating fingerprinted media having a plurality of fingerprinted segments, each fingerprinted segment of said fingerprinted media generated by selecting a corresponding media or marked media segment from one of said media and said at least one marked media; and at least one means for arranging the selected corresponding media or marked media segment into said each fingerprinted segment,

~~wherein said means for generating and said at least one means for arranging operates in such a manner that the arrangement of said plurality of fingerprinted segments as a result of selecting media segments from said at least one marked media provides said fingerprinted media such that the number of fingerprinted segments in said fingerprinted media is equal to the number of media segments in each marked media.~~